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10/069,580	05/17/2002	Hidetoshi Sugiyama	ASA-1069	3826

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EXAMINER

LEVKOVICH, NATALIA A

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/07/2006 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 17-28, 30-32 and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being unclear for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 17, the 'back-to-back' relationship between the lifters is indefinite, since the claim does not define any structural details of the lifters, and it is not clear what part of the lifters comprises the 'back'. See also claims 30 and 35.

With respect to claim 21, the functional language used in lines 4-7, does not set forth any structure which would provide for the recited functionality.

Referring to claims 22 and 25, note that the claims are narrative in form and replete with indefinite and functional or operational language which recites a process steps (see also claim 23) and does not set forth further structural limitations of the claimed invention.

In reference to claim 24, lines 1-2, the 'parts....changed for each sample' is unclear and indefinite. Is 'a recovery lifter' in line 10 the same as 'a recovery lifter' in line 5?

With respect to claims 27 and 32, the functional language used in lines 4-7, does not set forth any structure which would provide for the recited functionality. It is also unclear whether or not the controller contributes to the functionality mentioned above. See also claims 28, 33 and 36.

In claim 32, line 2, the 'movable table' lacks antecedent basis in the claim. See also claim 34, line 4.

In claim 34, it is not clear in what sense the 'wall' would 'fit the size of said part rack' (the size of which was not identified I the claims).

In claim 35, lines 1-4, the 'analyzer that analyzes samples by taking out a...tip' and using the tip for dispensation, is unclear.

Claim Interpretation

4. With respect to claims 22 and 25, note that the claims do not have further structural limitations and, therefore, are not accorded patentable weight.

Referring to claims 23, 28, 33 and 36, note that the alarm is not positively claimed, therefore, it is not considered to be a part of the claimed invention and is not accorded any patentable weight. The same consideration applies to the guide wall recited in claim 34.

With respect to claims 18, 19, 21, 29 and 32, note that the recitation that an element is "able to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. (See *In re Hutchinson*, 69 USPQ 138).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 17 is rejected under 35 U.S.C. 102(b) as anticipated by Miura et al. (US 5190434).

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Miura discloses an article supplier comprising a "first elevator for supplying articles ['supply lifter' – Ex.] contained in a pallet to a robot ['rack separator' – Ex.], a second elevator ['recovery lifter' – Ex.] for discharging an empty pallet, and a driving mechanism for ...moving the first and second elevators ['equipment for positioning the lifters' – Ex.] - (Abstract). As shown in Figure 7A, the elevators are disposed on the bottom surface of the body 102 equipped with four casters 110 ['movable table' – Ex.].

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 18-20, 22, 24-26, 28-31 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura.

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With respect to claims 18-19, 24, 29 and 35, Miura does not teach a controller configured to determine the number of racks remaining on (or ought to be added to) the supply elevator. However, Miura does teach a controller linked to counters configured to count the number of articles remaining in the pallet ['rack' – Ex.] – (see Col.6, line5; Col.9, lines 15-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have configured the controller such as to count not only the number of articles on the rack, but also the number of racks, in the modified apparatus of Miura, in order to provide smooth supply and removal of the racks.

In regards to claims 20, 26 and 31, Miura does not teach the lifter positioning equipment to comprise two motors and two belts. However, Miura does teach, as shown in Figure 1, motor 8 connected to timing belt 9 for driving elevators 3 and 4 upwardly and downwardly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed motors and belts dedicated to each elevator, in the modified apparatus of Miura, in order to obtain more flexibility in controlling the elevators.

10. Claims 21, 27 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura in view of Farber et al. (US 4856073).

Miura does not teach a lift housing having a door which can be automatically locked to prevent an access to the lifters during the time of operation. However, this feature is very well known and used not only in regular elevators, but also in the art. For example Farber discloses an apparatus comprising, as illustrated in Figure 1, chamber 13 which includes elevator 27, slots ['racks' - Ex.] 25 and an access

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door (not shown). "All doors of apparatus 11 are normally locked and are under the control of controlling unit 73...the software of unite 73, prevents operator errors such as the insertion of a carrier into a slot whose occupant is at the inspection station, the changing of a reagent which is about to be dispensed, or the removing of the waste bin(biohazard bag) at a point when a carrier is about to be discarded" (Col.11, lines 5 and 15-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed a lift housing with a part introducing door locked during the lift operations in the modified apparatus of Miura, in order to provide security of the rack handling.

Allowable Subject Matter

11. Claim 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Although the closest prior art, (Miura and Woerner) discloses position sensors used for detecting positions of the racks, it does not teach, or fairly suggest the specifics of the controller configured to determine whether or not the uppermost rack 'has been properly separated and whether to continue or interrupt the operation, the determination being made based on the information received from the position sensors arranged in the particular manner, as recited in claim 23.

Response to Arguments

12. Applicant's arguments dated 02/07/2006 have been fully considered but they are moot in view of the new grounds of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Yahiro (USP 6,182,719) - discloses a plate handling apparatus comprising a lift with a guiding wall;

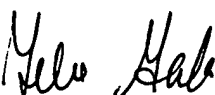
Woerner et al. (US 5882174) – discloses position sensors detecting “when the uppermost tray reaches the proper height for singulation. Another sensor ... detects when the last tray is at the top”.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Levkovich whose telephone number is 571-272-2462. The examiner can normally be reached on Mon-Fri, 8 a.m.-4p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


YELENA GAKH
PRIMARY EXAMINER